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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,490	06/18/2001	Tomohisa Okada	01349/LH	1250

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EXAMINER

TORRES, JUAN A

ART UNIT PAPER NUMBER

2631

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/868,490

Applicant(s)

OKADA, TOMOHISA

Examiner

Juan A Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10042004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statement filed June 18, 2001 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).  
"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

**(e) BACKGROUND OF THE INVENTION.**

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37  
CFR 1.97 and 1.98.

**(f) BRIEF SUMMARY OF THE INVENTION.**

**(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).**

**(h) DETAILED DESCRIPTION OF THE INVENTION.**

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A  
"Sequence Listing" is required on paper if the application discloses a  
nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if  
the required "Sequence Listing" is not submitted as an electronic  
document on compact disc).

The disclosure should use the headers BRIEF SUMMARY OF THE INVENTION; and  
DETAILED DESCRIPTION OF THE INVENTION.

Appropriate correction is required.

***Claim Objections***

Claims 1, 4 and 5 are objected to because of the following informalities:

As per claim 1, in line 5 recites "the outside". There is insufficient antecedent  
basis for this recitation limitation in the claim. It is suggested to be changed to "outside"

As per claim 1, in line 7 uses the term "RBW". There is insufficient antecedent  
basis for this recitation limitation in the claim. It is suggested to be changed to  
"resolution bandwidth (RBW)"

As per claim 1, in line 16 recites "and". There is insufficient antecedent basis for  
this recitation limitation in the claim. It is suggested to be changed to "or" as indicated in  
line 14 (either).

As per claim 1, in line 22 recites "operating/inputting". There is not clear what it means. It is suggested to be changed to "operating and inputting outside"

As per claim 1, in line 32 recites "modulate/analyze". There is not clear what it means. It is suggested to be changed to "modulate and analyze"

As per claim 1, in line 36 recites "operated/inputted". There is not clear what it means. It is suggested to be changed to "operated and inputted"

As per claim 1, in line 39 recites " operated/inputted ". There is not clear what it means. It is suggested to be changed to "operated and inputted"

As per claim 4, in line 2 uses the term "PCT". There is insufficient antecedent basis for this recitation limitation in the claim. It is suggested to be changed to "Personal Digital Cellular (PDC)"

As per claim 4, in line 2 uses the term "PHS". There is insufficient antecedent basis for this recitation limitation in the claim. It is suggested to be changed to "Personal Handyphone System (PHS)"

As per claim 4, in line 2 uses the term "is inputted". There is insufficient antecedent basis for this recitation limitation in the claim. It is suggested to be changed to "signal is inputted"

As per claim 5, in line 2 uses the term "CDMA". There is insufficient antecedent basis for this recitation limitation in the claim. It is suggested to be changed to "Code Division Multiple Access (CDMA)"

As per claim 5, in line 2 uses the term "W-CDMA". There is insufficient antecedent basis for this recitation limitation in the claim. It is suggested to be changed to "Wideband Code Division Multiple Access (W-CDMA)"

As per claim 5, in line 2-3 uses the term "is inputted". There is insufficient antecedent basis for this recitation limitation in the claim. It is suggested to be changed to "signal is inputted"

Appropriate correction is required.

***Allowable Subject Matter***

Claims 1-10 are allowable over prior art (if the above objections are overcome).

The following is an examiner's statement of reasons for allowance: claim 1-10 are allowed because the references cited fail to teach, as applicant has, a modulation signal analysis apparatus comprising of a frequency converter for converting frequency of a modulation signal inputted from the outside intermediate frequency; an RBW filter for receiving the modulation signal outputted from said frequency converter and limiting a frequency component with a bandwidth determined by designated resolution; level converter for converting the modulation signal having a band limited by said RBW filter to a digital level signal perform frequency analysis; signal selection circuit for selecting either one modulation signal from the modulation signal before having the band limited by said RBW filter and modulation signal after having the band limited by said RBW filter; an A/D converter receiving the modulation signal selected by signal selection circuit and converting the modulation signal digital signal; an operation input section for operating/inputting a frequency analysis instruction for said modulation signal, a

modulation analysis instruction for said modulation signal, and a modulation type of said modulation signal; an analysis operation section using the digital signal converted by A/D converter and performing frequency analysis for said modulation signal and modulation analysis for the modulation signal selected by the signal selection circuit order to modulate/analyze a level signal outputted from said level converter; controller for instructing said analysis operation section to execute the analysis instruction operated/inputted via said operation input section, sending a selection instruction said signal selection circuit in accordance with the modulation type of the operated/inputted modulation signal, and setting the bandwidth of said RBW filter in accordance with the modulation type of said modulation signal when the modulation signal having the band limited by said RBW filter selected as the modulation signal inputted to said A/D converter, and the modulation analysis instruction for said modulation signal is inputted to said operation input section, as the applicant has claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Seike et al. (US 6112067) and Seike et al. (US 6243576) discloses a radio communication analyzer suited for measurement of plurality of types of digital communication systems; Uchino et al. (US 6509728) discloses Spectrum analyzer having function of displaying amplitude probability distribution effectively. They

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do not disclose the possibility of selecting either a modulation signal before having the band limited by a resolution bandwidth (RBW) filter or the modulation signal after having the band limited by a RBW filter signal.

**Conclusion**

This application is in condition for allowance except for the following formal matters:

See objections above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

  
MOHAMMED GHAYOUR  
SUPERVISORY PATENT EXAMINER



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT

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10 / 15 / 2004